



**About This Study:
A Description of Methodology, Frequently Asked
Questions, and Frequently Used Terms**

This document is taken directly from the final report from our most recent national study—*Arts and Economic Prosperity IV*—which was published in June 2012. It is included in the Study Welcome Packet to provide background about the project and help you answer questions that you may receive about the study in your community.

Because your study will employ the same methodology, these materials are relevant and may prove helpful to you.

LEAKAGE

The money that community members spend outside of a community. This nonlocal spending has no economic impact within the community. A ballet company purchasing shoes from a nonlocal manufacturer is an example of leakage. If the shoe company were local, the expenditure would remain within the community and create another round of spending by the shoe company.

**RESIDENT HOUSEHOLD INCOME
(OR PERSONAL INCOME)**

The salaries, wages, and entrepreneurial income residents earn and use to pay for food, mortgages, and other living expenses. It is important to note that resident household income is not just salary. When a business receives money, for example, the owner usually takes a percentage of the profit, resulting in income for the owner.

REVENUE TO LOCAL AND STATE GOVERNMENTS

Local and state government revenue is not derived exclusively from income, property, sales, and other taxes. It also includes license fees, utility fees, user fees, and filing fees. Local government revenue includes funds to governmental units such as a city, county, township, school district, and other special districts.



“In Nebraska, we understand that cultural excellence is crucial to economic development. The economic impact of arts organizations on our state is significant, and without the quality and diversity of the arts, it would be difficult to attract and promote business development. Arts-related industries create jobs, attract investments, and enhance tourism. Additionally, the arts connect us to each other and add richness to our lives.”

LT. GOVERNOR RICK SHEEHY
Chair, National Lt. Governors Association

“Americans for the Arts continues to develop the tools for arts advocates and the evidence to persuade decision-makers that the arts benefit all people in all communities.”

JANET BROWN
Executive Director, Grantmakers in the Arts

7 What other information was collected in addition to the arts surveys?

In addition to detailed expenditure data provided by the participating eligible organizations, extensive wage, labor, tax, and commerce data were collected from local, state, and federal governments for use in the input-output model.

8 Why are admission/ticket expenses excluded from the analysis of audience spending?

Researchers make the assumption that any admission fees paid by attendees are typically collected as revenue by the organization that is presenting the event. The organizations then spend those dollars. Thus, the ticket fees are captured in the operating budgets of the eligible nonprofit arts and culture organizations that participate in the organizational data collection effort. Therefore, the admissions paid by audiences are excluded from the audience spending analysis in order to avoid "double-counting" those dollars in the overall analysis.

9 Why doesn't this study use a multiplier?

When many people hear about an economic impact study, they expect the result to be quantified in what is often called a multiplier or an economic activity multiplier. The economic activity multiplier is an estimate of the number of times a dollar changes hands within the community (e.g., a theater pays its actor, the actor spends money at the grocery store, the grocery store pays the cashier, and so on). It is quantified as one number by which expenditures are multiplied. The convenience of the multiplier is that it is one simple number. Users rarely note, however, that the multiplier is developed by making gross estimates of the industries within the local economy and does not allow for differences in the characteristics of those industries. Using an economic activity multiplier usually results in an overestimation of the economic impact and therefore lacks reliability.

Acknowledgements

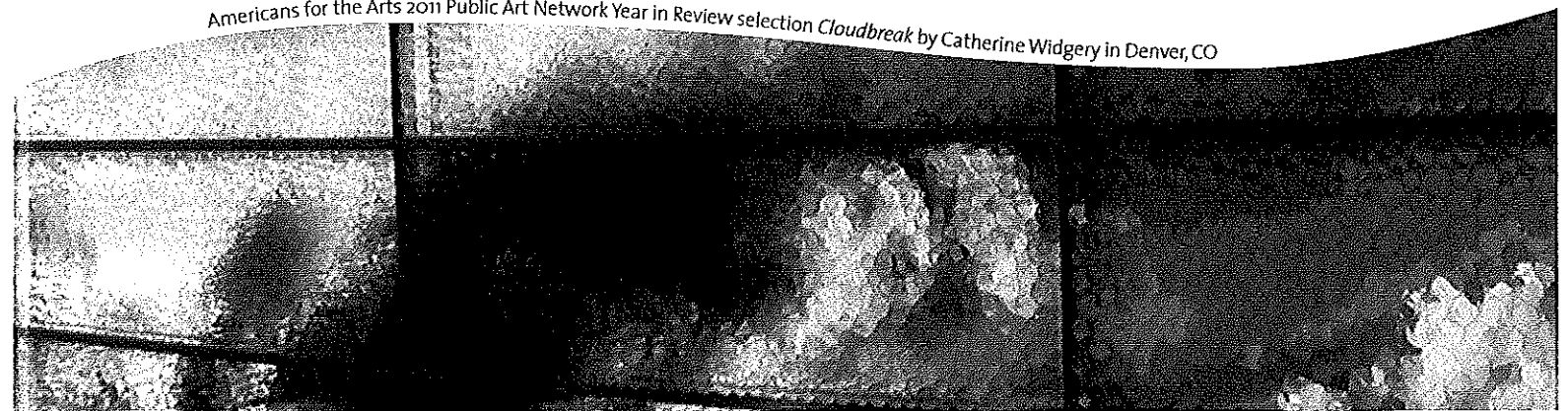
Americans for the Arts wishes to express its gratitude to the many people across the country who made *Arts & Economic Prosperity IV* possible and assisted with its development, coordination, and production. A study of this size and scope cannot be completed without the collaboration of many partnering organizations.

Special thanks to the John D. and Catherine T. MacArthur Foundation and The Ruth Lilly Fund for Americans for the Arts for their financial support. Thanks also to Cultural Data Project for their research partnership.

Finally, each of our 182 local, regional, and state-wide research partners contributed both time and financial support toward the completion of this study. Thanks to all of you. This study would not have been possible without you.

A study of this magnitude is a total organizational effort; appreciation is extended to the entire board and staff of Americans for the Arts. The Research Department responsible for the production of this study includes Randy Cohen, Ben Davidson, Amanda Alef, and Sam Myett.

Americans for the Arts 2011 Public Art Network Year in Review selection *Cloudbreak* by Catherine Widgery in Denver, CO



definitive classification system for nonprofit organizations recognized as tax exempt by the Internal Revenue Code. This system divides the entire universe of nonprofit organizations into 10 Major categories, including "Arts, Culture, and Humanities." The Urban Institute reports that 113,000 nonprofit arts and culture organizations were registered with the IRS in 2010, up from 94,450 in 2005.

Below is a complete list of the 43 NTEE "Arts, Culture, and Humanities" subcategories that are included in the *Arts & Economic Prosperity IV* study analysis.

- A01 – Alliances and Advocacy
- A02 – Management and Technical Assistance
- A03 – Professional Societies and Associations
- A05 – Research, Institutes and Public Policy Analysis
- A11 – Single Organization Support
- A12 – Fund Raising and Fund Distribution
- A19 – Support (not elsewhere classified)
- A20 – Arts and Culture (general)
- A23 – Cultural and Ethnic Awareness
- A24 – Folk Arts
- A25 – Arts Education
- A26 – Arts and Humanities Councils and Agencies
- A27 – Community Celebrations
- A30 – Media and Communications (general)
- A31 – Film and Video
- A32 – Television
- A33 – Printing and Publishing
- A34 – Radio
- A40 – Visual Arts (general)
- A50 – Museums (general)
- A51 – Art Museums
- A52 – Children's Museums
- A53 – Folk Arts Museums
- A54 – History Museums
- A56 – Natural History and Natural Science Museums
- A57 – Science and Technology Museums
- A60 – Performing Arts (general)
- A61 – Performing Arts Centers
- A62 – Dance
- A63 – Ballet
- A65 – Theatre
- A68 – Music
- A69 – Symphony Orchestras
- A6A – Opera
- A6B – Singing and Choral Groups
- A6C – Bands and Ensembles
- A6E – Performing Arts Schools
- A70 – Humanities (general)
- A80 – Historical Organizations (general)
- A82 – Historical Societies and Historic Preservation
- A84 – Commemorative Events
- A90 – Arts Services (general)
- A99 – Arts, Culture, and Humanities (miscellaneous)

In addition, the 182 study communities were encouraged to include other types of eligible organizations if they play a substantial role in the cultural life of the community or if their primary purpose is to promote participation in, appreciation for, and understanding of the visual, performing, folk, and media arts. These include government-owned or government-operated cultural facilities and

Using all three methods of data capture, information was collected from a total of 9,721 eligible nonprofit arts and culture organizations and programs for this study. Response rates among all the 182 study regions averaged 43.2 percent and ranged from 5.3 percent to 100 percent. Responding organizations had budgets ranging from a low of \$0 to a high of \$239.7 million. It is important to note that each study region's results are based solely on the actual survey data collected. No estimates have been made to account for non-respondents. Therefore, the less-than-100 percent response rates suggest an understatement of the economic impact findings in most of the individual study regions.

The questionnaires used for all three methods of organizational data collection can be found in Appendix C of the *Arts & Economic Prosperity IV* National Statistical Report.

Collection of Data from Arts and Culture Audiences

Audience-intercept surveying, a common and accepted research method, was conducted in all 182 study regions in order to capture information about spending by audiences at nonprofit arts and culture events. Patrons were asked to complete a short survey while attending an event. Researchers provided the local, regional, and statewide study partners with comprehensive and detailed guidelines for collecting a random sample of surveys from attendees to a broad range of cultural events, performances, and exhibits taking place in each study region during 2011. Surveys were collected throughout the calendar year (to guard against seasonal spikes or drop-offs in attendance) as well as at a broad range of both paid and free events (a night at the opera will typically yield more spending than a Saturday children's theater production or a community festival, for example).

The study partners mailed or shipped the completed original surveys to Americans for the Arts. Researchers completed the coding and data entry of all surveys. The surveys were then subjected to a rigorous data cleaning procedure.

- Surveys were removed if the respondent did not provide either the ZIP code of his/her primary home, or their primary reason for being in the study region. With neither of those two data points, the respondent's residency status could not be determined.
- Surveys were removed if the respondent reported that he/she is younger than 18 years of age.
- Surveys were removed if the respondent reported that his/her immediate travel party spent more than seven nights away from their primary residence(s) as a result of attending the cultural event where they were surveyed.
- Surveys were removed if the respondent reported that his/her immediate travel party included more than 12 people.
- Surveys were removed if the respondent reported that his/her immediate travel party spent more than \$500 per person as a result of attending the cultural event where they were surveyed.

revenues provided by the U.S. Department of Commerce (County Business Patterns, Regional Economic Information System, and Survey of State and Local Finance), local tax data (sales taxes, property taxes, and miscellaneous local option taxes), as well as the survey data from the responding nonprofit arts and culture organizations and their audiences.

The Input-Output Modeling Process

The input-output model is based on a table of 533 finely detailed industries showing local sales and purchases. The local and state economy of each community is researched so the table can be customized for each community. The basic purchase patterns for local industries are derived from a similar table for the U.S. economy for 2007 (the latest detailed data available from the U.S. Department of Commerce). The table is first reduced to reflect the unique size and industry mix of the local economy, based on data from County Business Patterns and the Regional Economic Information System of the U.S. Department of Commerce. It is then adjusted so that only transactions with local businesses are recorded in the inter-industry part of the table. This technique compares supply and demand and estimates the additional imports or exports required to make total supply equal total demand. The resulting table shows the detailed sales and purchase patterns of the local industries. The 533-industry table is then aggregated to reflect the general activities of 32 industries plus local households, creating a total of 33 industries. To trace changes in the economy, each column is converted to show the direct requirements per dollar of gross output for each sector. This direct-requirements table represents the “recipe” for producing the output of each industry.

The economic impact figures for *Arts & Economic Prosperity IV* were computed using what is called an “iterative” procedure. This process uses the sum of a power series to approximate the solution to the economic model. This is what the process looks like in matrix algebra:

$$T = IX + AX + A^2X + A^3X + \dots + A^nX$$

T is the solution, a column vector of changes in each industry’s outputs caused by the changes represented in the column vector X. A is the 33 by 33 direct requirements matrix. This equation is used to trace the direct expenditures attributable to nonprofit arts organizations and their audiences. A multiplier effect table is produced that displays the results of this equation. The total column is T. The initial expenditure to be traced is IX (I is the identity matrix, which is operationally equivalent to the number 1 in ordinary algebra). Round 1 is AX, the result of multiplying the matrix A by the vector X (the outputs required of each supplier to produce the goods and services purchased in the initial change under study). Round 2 is A²X, which is the result of multiplying the matrix A by Round 1 (it answers the same question applied to Round 1: “What are the outputs required of each supplier to produce the goods and services purchased in Round 1 of this chain of events?”). Each of columns 1 through 12 in the multiplier effects table represents one of